



IPW

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May 11, 2004

  
Margaret H. Efron, Patent Attorney

INFORMATION DISCLOSURE  
STATEMENT  
Patent Application  
Docket No. UF-318XC1  
Serial No. 10/719,914

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit : *(not yet known)*  
Applicant(s) : Sartaj Kumar Sahni, Haibin Lu  
Serial No. : 10/719,914  
Filed : November 21, 2003  
For : Prefix Partitioning Methods for Dynamic Router Tables

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313

INFORMATION DISCLOSURE STATEMENT  
UNDER 37 CFR §§1.97 AND 1.98

Sir:

In accordance with 37 CFR §1.56, the references listed on the attached form PTO/SB/08 is being brought to the attention of the Examiner for consideration in connection with the examination of the above-identified patent application. Copies of the cited documents are enclosed.

Docket No. UF-318XC1  
Serial No. 10/719,914

The Applicants respectfully assert that the substantive provisions of 37 CFR §§1.97 and 1.98 are met by the foregoing statement.

Respectfully submitted,



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MHE/ue

Enclosure(s): Form PTO/SB/08  
Copies of cited references



MAY 13 2004

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE



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Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

### Complete if Known

Application Number	10/719,914			
Filing Date	November 21, 2003			
First Named Inventor	Sartaj Kumar Sahni			
Art Unit				
Examiner Name				
Sheet	1	of	4	
			Attorney Docket Number	UF-318XC1

### U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	U1	US 4,251,861	02-17-1981	Mago	All
	U2	US 4,833,468	05-23-1989	Larson <i>et al.</i>	All
	U3	US 5,555,405	09-10-1996	Griesmer <i>et al.</i>	All
	U4	US 5,701,467	12-23-1997	Freeston	All
	U5	US 5,761,440	06-02-1998	De Marco <i>et al.</i>	All
	U6	US 5,787,430	07-28-1998	Doeringer <i>et al.</i>	All
	U7	US 5,909,440	06-01-1999	Ferguson <i>et al.</i>	All
	U8	US 6,018,524	01-25-2000	Turner <i>et al.</i>	All
	U9	US 6,021,131	02-01-2000	Even	All
	U10	US 6,041,053	03-21-2000	Douceur <i>et al.</i>	All
	U11	US 6,061,712	05-09-2000	Tzeng	All
	U12	US 6,092,072	07-18-2000	Guha <i>et al.</i>	All
	U13	US 6,157,955	12-05-2000	Narad <i>et al.</i>	All
	U14	US 6,212,184	04-03-2001	Venkatachary <i>et al.</i>	All
	U15	US 6,266,706	07-24-2001	Brodnik <i>et al.</i>	All
	U16	US 6,289,013	09-11-2001	Lakshman <i>et al.</i>	All
	U17	US 6,335,932	01-01-2002	Kadambi <i>et al.</i>	All
	U18	US 6,341,130	01-22-2002	Lakshman <i>et al.</i>	All

Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard T.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

+ This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-145. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

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Substitute for form 1449A/PTO				<i>Complete if Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				Application Number	10/719,914
				Filing Date	November 21, 2003
				First Named Inventor	Sartaj Kumar Sahni
				Art Unit	
				Examiner Name	
Sheet	2	of	4	Attorney Docket Number	UF-318XC1

Examiner Signature		Date Considered	
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**INFORMATION DISCLOSURE  
 STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

3

of

4

**Complete if Known**

Application Number	10/719,914
Filing Date	November 21, 2003
First Named Inventor	Sartaj Kumar Sahni
Group Art Unit	
Examiner Name	

Attorney Docket Number

UF-318XC1

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	R1	DEGERMARK, MIKAEL, et al. (1997) "Small Forwarding Tables for Fast Routing Lookups" <i>ACM SIGCOMM Proceedings of the ACM SIGCOMM '97 conference on Applications, technologies, architectures, and protocols for computer communication</i> . pages 3-14.	
	R2	DOERINGER, W., G. KARJOTH, and M. NASSEHI (1996) "Routing on longest-matching prefixes" <i>IEEE/ACM Transactions on Networking</i> , 4(1): pages 86-87.	
	R3	ERGUN, FUNDA, et al. (2001) "A Dynamic Lookup Scheme for Bursty Access Patterns" <i>Proceedings of IEEE INFOCOM</i> pages 1-10.	
	R4	GUPTA, P. and N. MCKEOWN (2000) "Dynamic algorithms with worst-case performance for packet classification" <i>IFIP Networking</i> pages 528-539.	
	R5	LAMPSON, BUTLER, VENKATACHARY SRINIVASAN, and GEORGE VARGHESE (June 1999) "IP Lookups Using Multiway and Multicolumn Search" <i>IEEE/ACM Transactions on Networking Vol. 7, No. 3</i> , pages 324-334	
	R6	LU, H. and SAHNI, S. (2003) "O (log n) dynamic router-tables for prefixes and ranges" <i>IEEE Symposium on Computers and Communications</i> , pages 1-42	
	R7	NILSSON, STEFAN and GUNNAR KARLSSON (1998) "Fast address lookup for Internet routers" <i>Proceedings of IEEE Broadband Communications</i> (enclosed copy pages numbered 9-18).	
	R8	RUIZ-SANCHEZ, M., E. BIERSACK, and W. DABBOUS (Mar/Apr 2001) "Survey and taxonomy of IP address lookup algorithms" <i>IEEE Network</i> , 15(2): pages 8-23.	
	R9	SAHNI, SARTAJ and KUN SUK KIM "Data Structures of IP Lookup with Bursty Access Patterns" <a href="http://www.cise.ufl.edu/~sahni">www.cise.ufl.edu/~sahni</a> (enclosed copy pages numbered 1-5)	
	R10	SAHNI, SARTAJ and KUN SUK KIM (2001) "Efficient Construction of Fixed-Stride Multibit Tries for IP Lookup" <i>Proceedings of 8<sup>th</sup> IEEE Workshop on Future Trends of Distributed Computing Systems</i> pages 178-184 (enclosed copy pages numbered 1-7).	

Examiner Signature	Date Considered
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<p>Substitute for form 1449B/PTC</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p>(use as many sheets as necessary)</p>				<b>Complete if Known</b>	
Sheet	4	of	4	Application Number	10/719,914
				Filing Date	November 21, 2003
				First Named Inventor	Sartaj Kumar Sahni
				Group Art Unit	
				Examiner Name	
				Attorney Docket Number	UF-318XC1

#### NON PATENT LITERATURE DOCUMENTS

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	R11	SAHNI, SARTAJ and KUN SUK KIM (2002) "Efficient Construction of Variable-Stride Multibit Tries for IP Lookup" <i>Proceedings of IEEE Symposium on Applications and the Internet (SAINT)</i> pages 220-229 (enclosed copy pages numbered 1-8).	
	R12	SAHNI, SARTAJ and KUN SUK KIM (July 2002) "O(log n) Dynamic Packet Routing" <i>7<sup>th</sup> IEEE Symposium on Computers and Communications</i> . Pages 1-29	
	R13	SAHNI, SARTAJ, KUN SUK KIM, and HAIBIN LU (May 2002) "Data Structures for One-Dimensional Packet Classification Using Most-Specific-Rule Matching" <i>International Symposium on Parallel Architectures, Algorithms, and Networks (ISPAN)</i> pages 3-14 (enclosed copy pages numbered 1-12).	
	R14	SKLOWER, KEITH (1991) "A Tree-Based Packet Routing Table for Berkeley Unix" <i>Proceedings of 1991 Winter USENIX Conference</i> pages 93-99 (enclosed copy pages numbered 1-4).	
	R15	SRINIVASAN, V. and G. VARGHESE (Feb. 1999) "Faster IP Lookups Using Controlled Prefix Expansion" <i>ACM Transactions on Computer Systems</i> Vol.17, issue 1, pages 1-40 (enclosed copy pages numbered 1-21).	
	R16	SURI, S., G. VARGHESE, and P. WARKHEDE (2001) "Multiway range trees: Scalable IP lookup with fast updates" <i>Proceedings of Globecom '01</i> .	
	R17	WALDVOGEL, MARCEL et al. (1997) "Scalable High Speed IP Routing Lookups" <i>Proceedings of the ACM SIGCOMM '97 Conference on Applications, technologies, architectures, and protocols for computer communication</i> . pages 25-36 (enclosed copy pages numbered 1-12).	
	R18		
	R19		
	R20		
	R21		
	R22		

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